

REMARKS

The rejection of claims 13, 15 - 19 and 21 - 26 is respectfully traversed.

The Agahi reference cited by the examiner does not show all the limitations (of all the claims), as the examiner seems to think.

In particular, Agahi shows a p-type silicon transistor body in contact with a p-type silicon layer, so that the body layer is not strained. Agahi, therefore, does not show a strained silicon body in contact with a SiGe layer.

Agahi also does not disclose the overhang pad insulator of claim 15.

With respect to Hummler, the examiner has stated "Hummler discloses a DRAM (Fig. 10) that contains a SiGe wafer above a bulk substrate - -".

Applicants disagree with this statement. Hummler shows a list of several bulk substrates, including SiGe. Applicants interpret the phrase "compound semiconductors" on col. 4, line 24 as meaning ternary or

18 quaternary compounds. Hummler does not, however, disclose a mixture of
19 semiconductors in which one of the materials is strained; e. g. a strained
20 layer of silicon on a SiGe substrate. Hummler's teaching is a bulk
21 substrate that comprises an unstrained transistor body.

22 Hummler also does not disclose the overhang insulator of claim 15.

23 The sentence at the middle of page 4 of the Action beginning: "Agahi and
24 Hummler disclose all the limitations except for the vertical body layer on
25 an exposed surface and the exposed surface being recessed transversely - -
26 -under an overhang" omits the limitation that the vertical transistor body is
27 strained because of lattice mismatch.

28 The examiner has made another error in describing the Birner reference.
29 The passage on Col 8, lines 23 - 31 does not describe the transistor body.
30 Rather, it describes a NITRIDE liner 61 (col 8, line 31). The transistor
31 body is not formed until Fig 18, when layer 85 is formed (the same
32 material as the layer next to it - Col 10, lines 1 - 3).

33 Thus, the examiner has assembled three references, all of which have
34 unstrained transistor bodies.

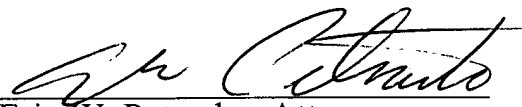
35 It is settled law that there must be a motive on suggestion to make a
36 combination. Applicants maintain that the examiner cannot combine three
37 references showing an unstrained transistor body, none of which has any
38 suggestion whatsoever that there should be a strain in the transistor body,
39 to meet the present claims.

40 Applicants maintain that the examiner's assertion, on page 4, line 18, that:
41 "It would have been obvious to - - by incorporating the exposed vertical
42 surface - - and extending upward - under an overhang to supply room for
43 the vertical body, which is a protective layer - - " is a) not obvious because
44 there is no suggestion to make the combination; and b) does not meet the
45 claims because layer 61 of Birner is not the transistor body, but is nitride.

46 Claim 13 has been amended slightly to improve its clarity.

47 For the foregoing reasons, allowance of the claims is respectfully
48 solicited.

49 Respectfully submitted,
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